10/582,609

~~10/513699~~

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAEAL1624

PASSWORD:917P742

```
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CASREACT' AT 18:01:31 ON 13 AUG 2007
FILE 'CASREACT' ENTERED AT 18:01:31 ON 13 AUG 2007
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ENTER STRUCTURE FORMAT (SIM), NOS:ide
'IDE' IS NOT A VALID STRUCTURE FORMAT KEYWORD
Structure Formats
SIA ----- Structure Image, Attributes, and map table if it contains
          data.  (Default)
SIM ----- Structure IMage.
SAT ----- Structure ATtributes and map table if it contains data.
SCT ----- Structure Connection Table and map table if it contains
          data.
SDA ----- All Structure DAta (image, attributes, connection table and
          map table if it contains data).
NOS ----- NO Structure data.
ENTER STRUCTURE FORMAT (SIM), NOS:end


=> .
. IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> file casreact
COST IN U.S. DOLLARS                        SINCE FILE      TOTAL
                                              ENTRY    SESSION
FULL ESTIMATED COST                           234.75     938.13

FILE 'CASREACT' ENTERED AT 18:05:20 ON 13 AUG 2007
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FILE CONTENT:1840 - 11 Aug 2007 VOL 147 ISS 8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

**************************************************************
*                                                            *
*     CASREACT now has more than 12 million reactions        *
*                                                            *
```

<12/04/2007> Erich Leese

10/582,609

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	501	(546/121,546/83,544/333,544/127).CCLS.	US-PGPUB; USPAT	OR	OFF	2007/08/13 17:19
L2	1	L1 AND DIHYDROPYRANO	US-PGPUB; USPAT	OR	ON	2007/08/13 17:20
L3	1	L2 AND IMIDAZO	US-PGPUB; USPAT	OR	ON	2007/08/13 17:20
L4	1	L3 AND PYRIDINE	US-PGPUB; USPAT	OR	ON	2007/08/13 17:20

****

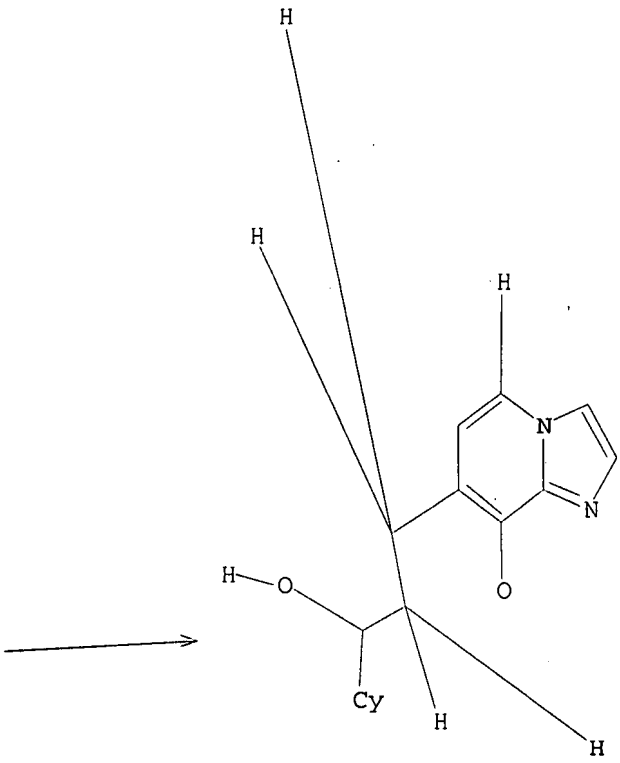
Some CASREACT records are derived from the ZIC/VINITI database (1974-1999) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=>
Uploading C:\Program Files\Stnexp\Queries\10582609b.str

L17 STRUCTURE UPLOADED

=> d l17
L17 HAS NO ANSWERS
L17 STR



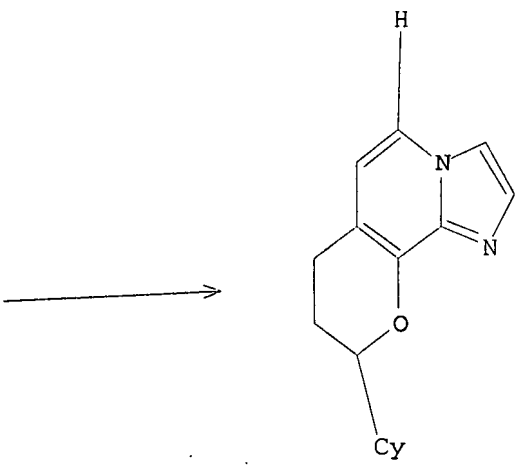
Structure attributes must be viewed using STN Express query preparation.

=>
Uploading C:\Program Files\Stnexp\Queries\10582609a.str

L18 STRUCTURE UPLOADED

=> d l18
L18 HAS NO ANSWERS
L18 STR

<12/04/2007> Erich Leese



Structure attributes must be viewed using STN Express query preparation.

```
=> s l17 full
FULL SEARCH INITIATED 18:06:08 FILE 'CASREACT'
SCREENING COMPLETE -       46 REACTIONS TO VERIFY FROM        6 DOCUMENTS

100.0% DONE      46 VERIFIED       0 HIT RXNS                      0 DOCS
SEARCH TIME: 00.00.01

L19            0 SEA SSS FUL L17 (     0 REACTIONS)

=> s l18 full
FULL SEARCH INITIATED 18:06:13 FILE 'CASREACT'
SCREENING COMPLETE -     1191 REACTIONS TO VERIFY FROM       57 DOCUMENTS

100.0% DONE    1191 VERIFIED      10 HIT RXNS                      2 DOCS
SEARCH TIME: 00.00.01

L20            2 SEA SSS FUL L18 (    10 REACTIONS)

=> d ibib abs fhit


L20  ANSWER 1 OF 2  CASREACT  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         111:77237  CASREACT
TITLE:                    Antiulcer agents.  4.  Conformational considerations
                          and the antiulcer activity of substituted
                          imidazo[1,2-a]pyridines and related analogs
AUTHOR(S):                Kaminski, James J.; Puchalski, Chester; Solomon,
                          Daniel M.; Rizvi, Razia K.; Conn, David J.; Elliott,
                          Arthur J.; Lovey, Raymond G.; Guzik, Henry; Chiu, P.
                          J. S.; et al.
CORPORATE SOURCE:         Pharm. Res. Div., Schering Res., Bloomfield, NJ,
                          07003, USA
SOURCE:                   Journal of Medicinal Chemistry (1989), 32(8), 1686-700
                          CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
GI
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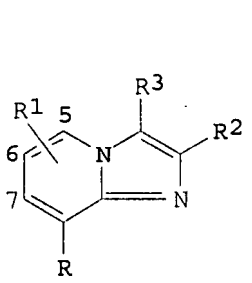
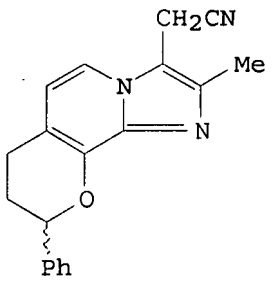


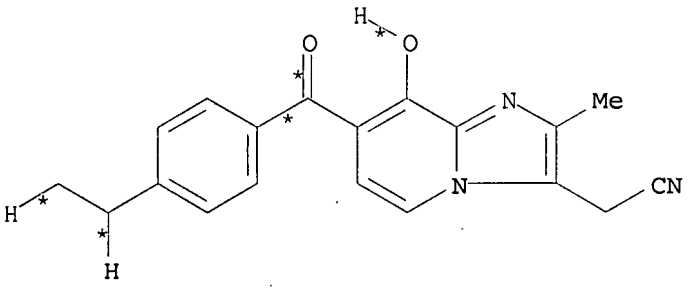
I



III

AB Definition of the interrelationship between the conformational characteristics of a series of substituted imidazo[1,2-a]pyridines and their antiulcer activity was investigated by examining the conformational properties of imidazo[1,2-a]pyridine I [R = PhCH2O, R1 = H, R2 = Me, R3 = CH2CN (II)], by using a variety of exptl. and theor. methods. The result of these studies was the identification of two distinctly different candidates, designated the folded and the extended conformation, resp., to represent the two possible min.-energy conformations of II. In order to select the biol. relevant conformer, a group of 3-substituted 2-methylimidazo[1,2-a]pyridines, having either a cis- or a trans-2-phenylethenyl substituent at the 8-position, were designed as conceptually simple and synthetically accessible semirigid analogs of the resp. candidate conformers. Gastric antisecretory activity was found to reside only in the trans isomers I (R = trans-PhCH:CH, R1 = H, R2 = Me; R3 = Me, CH2CN, NH2), which mimic the extended conformation. This observation led to the construction of imidazo[1,2-a]pyrano[2,3-c]pyridine-3-acetonitrile (III), a rigid tricyclic analog that is effectively locked in the extended conformation and that exhibited an antiulcer profile comparable to that of prototype II. These results unequivocally demonstrate that, in accord with expectation for a drug operating at a specific receptor, the conformational characteristics of the mol. have a substantial effect in determining its antiulcer activity. More precisely, it has been demonstrated that it is the extended conformation of II that represents the bioactive form of the drug. These results constitute the basis for a mol. probe that should aid in the investigation of the as yet uncharacterized gastric proton pump enzyme (H+/K+-ATPase), by means of which II and its analogs presumably exert their pharmacol. actions.

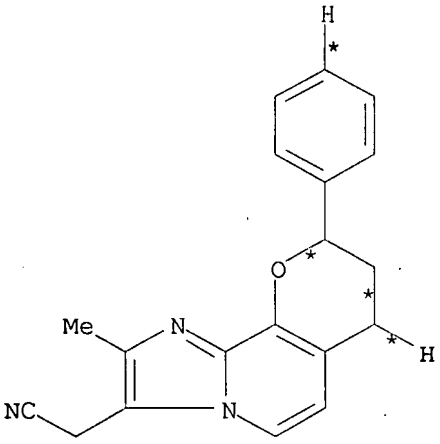
RX(54) OF 213 ...DT ===> DU...



● HCl

(54)

DT



DU

RX(54) RCT DT 121394-50-1

STAGE(1)
RGT C 16940-66-2 NaBH4
SOL 64-17-5 EtOH, 75-09-2 CH2Cl2

STAGE(2)
RGT DV 109-63-7 BF3-Et2O
SOL 75-09-2 CH2Cl2

PRO DU 93749-57-6
NTE sand used in second step

=> d ibib abs hitstr 2
'HITSTR' IS NOT A VALID FORMAT FOR FILE 'CASREACT'

The following are valid formats:

<12/04/2007> Erich Leese

ABS -------- GI and AB
ALL -------- BIB, AB, IND, RE, Single-step Reactions
APPS ------- AI, PRAI
BIB -------- AN, plus Bibliographic Data
CAN -------- List of CA abstract numbers without answer numbers
CBIB ------- AN, plus Compressed Bibliographic Data
DALL ------- ALL, delimited (end of each field identified)
IABS ------- ABS, indented with text labels
IALL ------- ALL, indented with text labels
IBIB ------- BIB, indented with text labels
IND -------- Indexing data
IPC -------- International Patent Classifications
ISTD ------- STD, indented with text labels
OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

MAX -------- Same as ALL
PATS ------- PI, SO
SCAN ------- TI and FCRD (random display, no answer number. SCAN must be entered on the same line as DISPLAY, e.g., D SCAN.)
SSRX ------- Single-Step Reactions (Map, Diagram, and Summary for all single-step reactions)
STD -------- BIB, IPC, and NCL

CRD -------- Compact Display of All Hit Reactions
CRDREF ----- Compact Reaction Display and SO, PY for Reference
FHIT ------- Reaction Map, Diagram, and Summary for first hit reaction
FHITCBIB --- FHIT, AN plus CBIB
FCRD ------- First hit in Compact Reaction Display (CRD) format
FCRDREF ---- First hit in Compact Reaction Display (CRD) format with CA reference information (SO, PY). (Default)
FPATH ------ PATH, plus Reaction Summary for the "long path"
FSPATH ----- SPATH, plus Reaction Summary for the "short path"
HIT -------- Reaction Map, Reaction Diagram, and Reaction Summary for all hit reactions and fields containing hit terms
OCC -------- All hit fields and the number of occurrences of the hit terms in each field. Includes total number of HIT, PATH, SPATH reactions. Labels reactions that have incomplete verifications.
PATH ------- Reaction Map and Reaction Diagram for the "long path". Displays all hit reactions, except those whose steps are totally included within another hit reaction which is displayed
RX --------- Hit Reactions (Map, Diagram, Summary for all hit reactions)
RXG -------- Hit Reaction Graphics (Map and Diagram for all hit reactions)
RXL -------- Hit Reaction Long (Map, Diagram, Summary for all hit reactions)
RXS -------- Hit Reaction Summariers (Map and Summary for all hit reactions)
SPATH ------ Reaction Map and Reaction Diagram for the "short path". Displays all single step reactions which contain a hit substance. Also displays those multistep reactions that have a hit substance in both the first and last steps of the reaction, except for

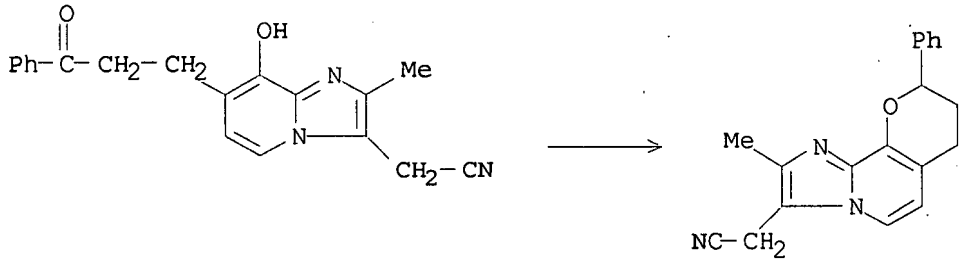
those hit reactions whose steps are totally included within another hit reaction which is displayed

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of combinations include: D TI; D BIB RX; D TI, AU, FCRD. The information is displayed in the same order as the specification. All of the formats, except CRD, CRDREF, FHIT, PATH, FPATH, SPATH, FSPATH, FCRD, FCRDREF, HIT, RX, RXG, RXS, SCAN, and OCC, may be used with the DISPLAY command to display the record for a specified Accession Number.

ENTER DISPLAY FORMAT (FCRDREF):.

L20 ANSWER 2 OF 2 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 3



HCl

REF: U.S., 4468400, 28 Aug 1984

=> d his

(FILE 'HOME' ENTERED AT 17:27:32 ON 13 AUG 2007)

FILE 'REGISTRY' ENTERED AT 17:27:41 ON 13 AUG 2007
L1 STRUCTURE UPLOADED
L2 189 S L1 FULL

FILE 'CAPLUS' ENTERED AT 17:28:17 ON 13 AUG 2007
L3 25 S L2 FULL

FILE 'REGISTRY' ENTERED AT 17:30:26 ON 13 AUG 2007
L4 STRUCTURE UPLOADED
L5 189 S L1 FULL
L6 20 S L4 FULL
L7 11 S L1
L8 1 S L4

FILE 'REGISTRY' ENTERED AT 17:42:10 ON 13 AUG 2007
L9 STRUCTURE UPLOADED
L10 189 S L9 FULL

FILE 'CAPLUS' ENTERED AT 17:42:34 ON 13 AUG 2007
L11 25 S L10 FULL

FILE 'CASREACT' ENTERED AT 17:46:49 ON 13 AUG 2007

```
L12              STRUCTURE UPLOADED
L13              STRUCTURE UPLOADED
L14           0 S L12
L15           2 S L12 FULL
L16           0 S L13 FULL

     FILE 'CASREACT' ENTERED AT 18:05:20 ON 13 AUG 2007
L17              STRUCTURE UPLOADED
L18              STRUCTURE UPLOADED
L19           0 S L17 FULL
L20           2 S L18 FULL
```